

CB

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _____

Source: _____

Date Processed by STIC: _____

10/530,843 B

PCT

07/03/2006

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



PCT

RAW SEQUENCE LISTING

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:52

Input Set : A:\Co10217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

3 <110> APPLICANT: Consortium fuer elektrochemische Industrie GmbH
 5 <120> TITLE OF INVENTION: Feedback-resistant Homoserine-Transsuccinylases
 7 <130> FILE REFERENCE: CO-P#####
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/530,843B
 C--> 10 <141> CURRENT FILING DATE: 2005-04-08
 12 <160> NUMBER OF SEQ ID NOS: 12
 14 <170> SOFTWARE: PatentIn Ver. 2.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 930
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Escherichia coli
 21 <220> FEATURE:
 22 <221> NAME/KEY: CDS
 23 <222> LOCATION: (1)..(930)
 25 <300> PUBLICATION INFORMATION:
 26 <301> AUTHORS: Blattner, F. R.
 27 <302> TITLE: The complete genome sequence of Escherichia coli K-12.
 28 <303> JOURNAL: Science
 29 <304> VOLUME: 277
 30 <305> ISSUE: 5331
 31 <306> PAGES: 1453-1474
 32 <307> DATE: 1997
 34 <400> SEQUENCE: 1
 35 atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt 48
 36 Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
 37 1 5 10 15
 39 gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa 96
 40 Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
 41 20 25 30
 43 att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att 144
 44 Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
 45 35 40 45
 47 gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag 192
 48 Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
 49 50 55 60
 51 gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tcg cgc aac acg 240
 52 Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
 53 65 70 75 80
 55 ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag 288
 56 Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
 57 85 90 95
 59 gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg 336
 60 Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu

Does Not Comply
Corrected Diskette Needed
(Pg-5)

RAW SEQUENCE LISTING

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:52

Input Set : A:\Col0217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

```

61          100          105          110
63  gtg gag ttt aat gat gtc gct tac tgg ccg cag atc aaa cag gtg ctg 384
64  Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
65          115          120          125
67  gag tgg tcg aaa gat cac gtc acc tcg acg ctg ttt gtc tgc tgg gcg 432
68  Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
69          130          135          140
71  gta cag gcc gcg ctc aat atc ctc tac ggc att cct aag caa act cgc 480
72  Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
73          145          150          155          160
75  acc gaa aaa ctc tct ggc gtt tac gag cat cat att ctc cat cct cat 528
76  Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
77          165          170          175
79  gcg ctt ctg acg cgt ggc ttt gat gat tca ttc ctg gca ccg cat tcg 576
80  Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
81          180          185          190
83  cgc tat gct gac ttt ccg gca gcg ttg att cgt gat tac acc gat ctg 624
84  Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
85          195          200          205
87  gaa att ctg gca gag acg gaa gaa ggg gat gca tat ctg ttt gcc agt 672
88  Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
89          210          215          220
91  aaa gat aag cgc att gcc ttt gtg acg ggc cat ccc gaa tat gat gcg 720
92  Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
93          225          230          235          240
95  caa acg ctg gcg cag gaa ttt ttc cgc gat gtg gaa gcc gga cta gac 768
96  Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
97          245          250          255
99  ccg gat gta ccg tat aac tat ttc ccg cac aat gat ccg caa aat aca 816
100  Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
101          260          265          270
103  ccg cga gcg agc tgg cgt agt cac ggt aat tta ctg ttt acc aac tgg 864
104  Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
105          275          280          285
107  ctc aac tat tac gtc tac cag atc acg cca tac gat cta cgg cac atg 912
108  Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
109          290          295          300
111  aat cca acg ctg gat taa 930
112  Asn Pro Thr Leu Asp
113  305
116 <210> SEQ ID NO: 2
117 <211> LENGTH: 309
118 <212> TYPE: PRT
119 <213> ORGANISM: Escherichia coli
121 <400> SEQUENCE: 2
122  Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
123    1          5          10          15
125  Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
126          20          25          30

```

RAW SEQUENCE LISTING

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:52

Input Set : A:\Col10217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

```

128 Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
129      35      40      45
131 Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
132      50      55      60
134 Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
135      65      70      75      80
137 Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
138      85      90      95
140 Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu
141      100      105      110
143 Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu
144      115      120      125
146 Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala
147      130      135      140
149 Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg
150      145      150      155      160
152 Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His
153      165      170      175
155 Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser
156      180      185      190
158 Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu
159      195      200      205
161 Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser
162      210      215      220
164 Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala
165      225      230      235      240
167 Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp
168      245      250      255
170 Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr
171      260      265      270
173 Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp
174      275      280      285
176 Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met
177      290      295      300
179 Asn Pro Thr Leu Asp
180      305

```

```

183 <210> SEQ ID NO: 3
184 <211> LENGTH: 30
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Description of Artificial Sequence:
190     Oligonucleotide metAfw
192 <400> SEQUENCE: 3
193 gatcccatgg ctccttttag tcattcttat
196 <210> SEQ ID NO: 4
197 <211> LENGTH: 36
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence

```

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RAW SEQUENCE LISTING

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:52

Input Set : A:\Col0217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

```

201 <220> FEATURE:
202 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
203     metArev
205 <400> SEQUENCE: 4
206     gatcgagctc agtactatta atccagcggt ggattc           36
209 <210> SEQ ID NO: 5
210 <211> LENGTH: 33
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
216     GAPDHfw
218 <400> SEQUENCE: 5
219     gtcgacgcgt gaggcgagtc agtcgcgtaa tgc           33
222 <210> SEQ ID NO: 6
223 <211> LENGTH: 42 n=1:1:1:1 mixture of A,T,C and G.
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
229     GAPDHrevII
231 <400> SEQUENCE: 6
232     gaccttaatt aagatctcat atgttccacc agctatttgt ta       42
235 <210> SEQ ID NO: 7
236 <211> LENGTH: 37
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
242     metAfw2
244 <400> SEQUENCE: 7
245     catggctcct tttagtcatt cttatattct aacgtag           37
248 <210> SEQ ID NO: 8
249 <211> LENGTH: 47
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
255     metArev2
257 <400> SEQUENCE: 8
258     acgcgtatgc atccagagct cagtactatt aatccagcgt tggattc       47
261 <210> SEQ ID NO: 9
262 <211> LENGTH: 25
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
268     metAmutfw1
270 <400> SEQUENCE: 9

```

RAW SEQUENCE LISTING

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:52

Input Set : A:\Co10217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

W--> 271 nnncagatca cgccatacga tctac
 274 <210> SEQ ID NO: 10
 275 <211> LENGTH: 23
 276 <212> TYPE: DNA
 277 <213> ORGANISM: Artificial Sequence
 279 <220> FEATURE:
 280 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
 281 metAmutrev1
 283 <400> SEQUENCE: 10
 284 gacgtaatag ttgagccagt tgg 23
 287 <210> SEQ ID NO: 11
 288 <211> LENGTH: 24
 289 <212> TYPE: DNA
 290 <213> ORGANISM: Artificial Sequence
 292 <220> FEATURE:
 293 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
 294 metAmutfw2
 296 <400> SEQUENCE: 11
 W--> 297 nnnggtttga ttgtaactgg tgcg 24
 300 <210> SEQ ID NO: 12
 301 <211> LENGTH: 21
 302 <212> TYPE: DNA
 303 <213> ORGANISM: Artificial Sequence
 305 <220> FEATURE:
 306 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
 307 metAmutrev2
 309 <400> SEQUENCE: 12
 310 aaagttctga tcctgaatat c 21

→ P/s Explain 'n' on ²⁵ line
 L2237. See pg-7 for
 Error Explanation..

→ Same Error

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/530,843B

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TIME: 11:58:53

Input Set : A:\Col0217se.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 1,2,3

Seq#:11; N Pos. 1,2,3

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23

Seq#:1; Line(s) 24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43

Seq#:1; Line(s) 44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

Seq#:1; Line(s) 64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83

Seq#:1; Line(s) 84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102

Seq#:1; Line(s) 103,104,105,106,107,108,109,110,111,112,114,115,116

Seq#:2; Line(s) 117,118,119,120,121,122,123,124,125,126,127,128,129,130,131

Seq#:2; Line(s) 132,133,134,135,136,137,138,139,140,141,142,143,144,145,146

Seq#:2; Line(s) 147,148,149,150,151,152,153,154,155,156,157,158,159,160,161

Seq#:2; Line(s) 162,163,164,165,166,167,168,169,170,171,172,173,174,175,176

Seq#:2; Line(s) 177,178,179,180,181,182,183

Seq#:3; Line(s) 184,185,186,187,188,189,190,191,192,193,194,195,196

Seq#:4; Line(s) 197,198,199,200,201,202,203,204,205,206,207,208,209

Seq#:5; Line(s) 210,211,212,213,214,215,216,217,218,219,220,221,222

Seq#:6; Line(s) 223,224,225,226,227,228,229,230,231,232,233,234,235

Seq#:7; Line(s) 236,237,238,239,240,241,242,243,244,245,246,247,248

Seq#:8; Line(s) 249,250,251,252,253,254,255,256,257,258,259,260,261

Seq#:9; Line(s) 262,263,264,265,267,268,269,270,271,272,273,274

Seq#:10; Line(s) 275,276,277,278,279,280,281,282,283,284,285,286,287

Seq#:11; Line(s) 288,289,290,291,293,294,295,296,297,298,299,300

Seq#:12; Line(s) 301,302,303,304,305,306,307,308,309,310,311,312,313

VARIABLE LOCATION SUMMARY

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:53

Input Set : A:\Col0217se.txt

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Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Error Explanation

Seq#:9; N Pos. 1,2,3

Seq#:11; N Pos. 1,2,3

VERIFICATION SUMMARY

DATE: 07/03/2006

PATENT APPLICATION: US/10/530,843B

TIME: 11:58:53

Input Set : A:\Co10217se.txt

Output Set: N:\CRF4\07032006\J530843B.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:271 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:9
L:271 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:9
L:271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:297 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:11
L:297 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:11
L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0